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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,573	12/12/2003	Wendelin Frick	DEAV2002/0087 US NP	1865
5487	7590	05/04/2007		
ROSS J. OEHLER			EXAMINER	
SANOFI-AVENTIS U.S. LLC			ISSAC, ROY P	
1041 ROUTE 202-206				
MAIL CODE: D303A			ART UNIT	PAPER NUMBER
BRIDGEWATER, NJ 08807			1623	
			NOTIFICATION DATE	DELIVERY MODE
			05/04/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

10/734,573

Applicant(s)

FRICK ET AL.

Examiner

Roy P. Issac

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
    Paper No(s)/Mail Date 3/05/04; 11/18/05.
- 4) ☐ Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

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### **DETAILED ACTION**

This application claims priority under 35 U.S.C § 119(e) from the provisional application 60/466,449 filed on 04/29/2003, and under 35 U.S.C §119 (a)-(d) and 365(c) to foreign application GERMANY 10258008.1-43 filed 12/12/2002, and under 120 and 365(c) to PCT/EP03/13455 filed 11/28/2003. A certified copy of the foreign application GERMANY 10258008.1-43 in German is received. No translation of the foreign language document is received.

### ***Election/Restrictions***

Applicant's election without traverse of invention of Group I, claims 1-8 and species of example 9 of table I in the reply filed on 02/15/2007 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement between inventions of Groups I and II, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Because these inventions are independent or distinct for the reasons set forth in the restriction requirement mailed 15 September 2006 and because the response was made without pointing out any supposed errors, the requirement is deemed proper and is therefore made FINAL.

Claims 9-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected species.

The claims have been examined insofar as they read on the elected specie.

### ***Claim Rejections - 35 USC § 103***

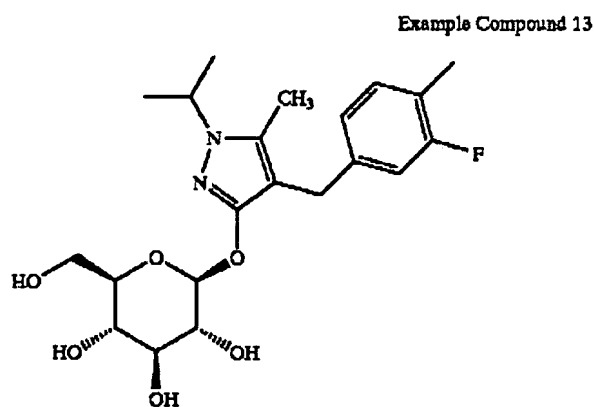
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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

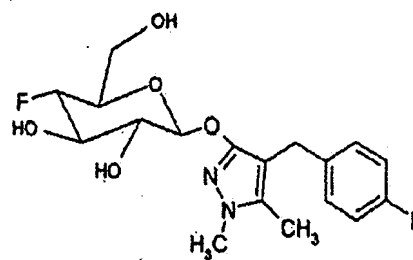
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsumi et. al. (U.S. Patent No. 6,815,428; PTO-892) in view of Blanchard et. al. (Chemistry & Biology, 8, 2001, 627-633; PTO-892).

Ohsumi et. al. discloses a series of compounds with strong structural similarity to the elected species herein. (Examples 1-16, Columns 31-35, Claims 1-17). Ohsumi et. al. discloses the following compound for the treatment of diabetes. (Column 34, lines 1-15).



Ohsumi et. al.



Instant Application

The differences between the elected species and the above compound are as follows;

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- i. The elected species has isopropyl substitution for the nitrogen on the pyrazole ring while the Ohsumi discloses isopropyl in example 13. However, Ohsumi further discloses lower alkyl group substituents in general for the pyrazole ring. (Claim 1, Column 37, lines 15-25).
- ii. The fluorine substituent of the benzyl is in the meta position in Ohsumi while the instant application discloses fluorine substitution at the para position. The halogen substitution is generally disclosed for all positions of the phenyl ring. (Claim 1, Column 37, lines 15-27).
- iii. The benzyl group is substituted with a methyl group in the para position in Ohsumi while the instant application doesn't contain a methyl substituent.
- iv. The instant application discloses fluorine substitution of the sugar moiety.

Ohsumi et. al. does not expressly disclose the specific compound of the elected species or compounds with fluorine substitution of the sugar moiety.

Blanchard et. al. discloses that the substitution of fluorine in sugar in either C2 or C5 positions can significantly slow the metabolism of glycosides. (Page 628, Column 1, Paragraph 3 to Column 2, Paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make and use the compound of the instant application because the compound is a structural analog of the compounds disclosed for the treatment of diabetes by Ohsumi et. al.

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One of ordinary skill in the art would have been motivated to make and use the instant compound for the treatment of diabetes because the compound is a structural analog of those disclosed in Ohsumi et. al. and the substitution of the sugar moiety with fluorine is expected to slow metabolism of the compound without sacrificing the inhibitory efficacy.

Therefore, one of ordinary skill in the art would have reasonably expected that the substitution of the sugar moiety with fluorine will result in substantially similar or better pharmaceutical efficacy.

As noted in MPEP 2144, "If such a species or subgenus is structurally similar to that claimed, its disclosure may motivate one of ordinary skill in the art to choose the claimed species or subgenus from the genus, based on the reasonable expectation that structurally similar species usually have similar properties. See, e.g., Dillon, 919 F.2d at 693, 696, 16 USPQ2d at 1901, 1904. See also Deuel, 51 F.3d at 1558, 34 USPQ2d at 1214. The utility of such properties will normally provide some motivation to make the claimed species or subgenus. Id. Dillon, 919 F.2d at 697, 16 USPQ2d at 1904-05 (and cases cited therein). If the claimed invention and the structurally similar prior art species share any useful property, that will generally be sufficient to motivate an artisan of ordinary skill to make the claimed species. In fact, similar properties may normally be presumed when compounds are very close in structure. Dillon, 919 F.2d at 693, 696, 16 USPQ2d at 1901, 1904. See also In re Grabiak, 769 F.2d 729, 731, 226 USPQ 870, 871 (Fed. Cir. 1985) ("When chemical compounds have very close' structural similarities and similar utilities, without more a prima facie case may be made."). Thus, evidence of

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similar properties or evidence of any useful properties disclosed in the prior art that would be expected to be shared by the claimed invention weighs in favor of a conclusion that the claimed invention would have been obvious. Dillon, 919 F.2d at 697-98, 16 USPQ2d at 1905; In re Wilder, 563 F.2d 457, 461, 195 USPQ 426, 430 (CCPA 1977); In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Thus, the claimed invention as a whole is clearly prima facie obvious over the combined teachings of the prior art.

No claim is allowed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy P. Issac whose telephone number is 571-272-2674. The examiner can normally be reached on 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 1623

  
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